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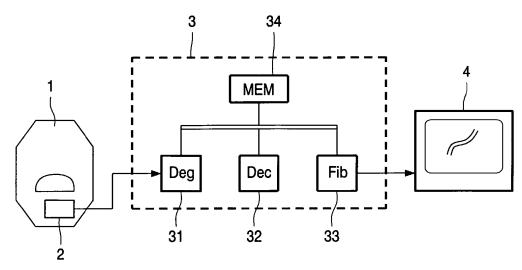
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(54) Title: HIGH ANGULAR RESOLUTION DIFFUSION WEIGHTED MRI



(57) Abstract: A magnetic resonance imaging method involves acquisition of magnetic resonance signals with application of diffusion weighting at a plurality of diffusion weighting strengths diffusion directions. An object dataset is reconstructed from the magnetic resonance signals in which apparent diffusion coefficients are assigned. The occurrence of one single or several diffusion directions in identified for individual voxels. In this way account is taken of crossing fibres.